TABLE II
THE TOP 10 TOTAL REVENUES

Rank '89	Rank '88	Company	'89 $ Revenues (millions)	'89% Change
1	1	Pacific Gas & Electric	8,588	12.33
2	2	Southern Company*	7,492	3.55
3	3	SCEcorp*	6,904	10.42
4	4	FPL Group* (FP&L)	6,197	5.88
5	5	Commonwealth Edison	5,751	2.45
6	6	Consolidated Edison	5,550	8.65
7	7	American Electric Power*	5,140	6.19
8	8	Public Service Enterprise Group*	4,804	9.33
9	9	Texas Utilities*	4,320	4.02
10	10	Houston Industries*	3,789	3.84

the Top 10 last year, but in slightly different order.

Revenues increased

Total revenues for the Top 100 Electric Utilities increased in 1989 by 4.8 percent, to $165.5 billion. The 4.8-percent increase was the same as a year ago. Total revenues recorded for 1988 were $158 billion.

As mentioned earlier, the total was a new industry record. The previous record was established in 1988. Total revenues include the proceeds from all activities of both holding companies and electric utilities.

While revenues from electric operations represented the largest portion of total revenues, they grew the least in 1989. Electric revenues gained 4.7 percent in 1989. Revenues from gas operations increased by 5.2 percent and those from "other" operations jumped by 14.8 percent.

Rate increases again played a large role in the increase of electric revenues, since kWh sales increased only 2.6 percent.

Eighty companies reported revenue gains in 1989, down from 90 companies a year earlier. Median revenue gain was 3.31 percent, down from 4.36 percent a year ago.

The largest revenue gain was posted by Hawaiian Electric Co., 20.76 percent, up from fourth in 1988. Idaho Power ranked second, 20.3 percent, a substantial improvement from its 49th ranking a year ago.

Income bounces back

Net income for the Top 100 rebounded in 1989, after two consecutive years of declines. For '89, income for the 99 companies reporting to *EL&P* moved ahead to $15.1 billion, a 10.8 percent increase.

Moreover, the *quality* of net income was improved in 1989.

Although the gain in net income production reversed two years of decline, the total posted by the 99 electric utilities reporting to *EL&P* still lagged behind 1984—five years earlier—when total net income for common stock hit $16.7 billion.

Interestingly, almost all of the increase came on the strength of electric utility operations. Net income of holding companies increased less than half a million dollars, reflecting the less-than-impressive performance of non-utility activities.

While total performance was improved, more utilities encountered major financial problems in 1989 than in the previous year. Ten utilities reported losses for the year, compared with a year earlier when only four utilities ended the year in the red. Pinnacle West Capital Corp., parent of Arizona Public Service Co., suffered the greatest loss (-$551.4 million) as a result of the col-

FINANCIAL STATISTICS

Company	Net Income Rank	Net Income % Gain	Revenue Rank	Revenue % Gain	Sales (KWH) Rank	Sales (KWH) % Gain	Int. Cov. Ratio 1989	Int. Cov. Ratio 1988	Earnings Per Share $ 1989	Price/Share 1989 (Dollars) High	Price/Share 1989 (Dollars) Low	% Change Long-Term Debt '88-'89
Pacific Gas & Electric	1	1,349.66	4	12.33	45	2.19	1.08	0.08	1.90	22.000	17.250	0.35
Centel*	2	229.62	21	8.47	85	-1.27	NA	NA	5.11	44.830	22.060	NA
Carolina Power & Light	3	91.08	14	9.12	43	2.68	1.53	0.77	4.20	48.000	35.000	-5.39
Idaho Power	4	79.63	2	20.33	2	17.75	1.46	0.85	22.37	30.000	22.000	-2.49
Ohio Edison	5	78.83	76	0.58	98	-10.67	0.98	0.57	2.18	24.000	18.625	-4.20
Interstate Power	6	28.95	88	-1.32	66	1.08	1.47	1.04	2.73	25.625	21.250	-0.21
Iowa Resources*	7	26.61	48	3.47	83	-0.90	1.42	1.29	1.90	22.000	17.000	-0.27
Public Service of Indiana	8	26.25	66	1.52	29	3.59	1.65	1.07	2.32	18.000	13.125	-13.00
Midwest Energy*	9	24.79	55	2.80	1	23.17	1.35	1.21	2.28	22.250	18.000	-0.07
Minnesota Power	10	23.96	71	0.75	78	0.16	1.87	1.61	2.90	27.625	22.875	1.60
Public Service of Colorado	11	21.42	51	3.29	42	2.72	1.36	1.12	2.59	27.000	20.000	-3.10
Texas Utilities*	12	21.23	40	4.02	54	1.51	1.64	1.34	4.44	37.625	27.750	1.17
Commonwealth Energy System*	13	20.10	3	17.00	73	0.58	0.95	1.08	4.14	38.375	29.750	54.25
Kentucky Utilities	14	20.09	96	-4.99	95	-6.33	2.40	2.00	2.32	20.875	17.875	0.04
Utilicorp United	15	18.19	17	8.79	48	1.99	0.98	1.05	2.04	22.250	17.500	22.21
Entech*	16	17.98	72	0.65	8	9.47	0.49	0.61	0.87	21.125	17.000	2.02
TECO Energy*	17	17.07	68	1.41	27	3.78	2.24	2.25	2.36	29.500	22.000	-0.05
Hawaiian Electric*	18	16.48	1	20.66	30	3.58	1.68	1.60	3.06	40.250	29.380	8.57
CMS Energy*	19	14.92	75	0.63	61	1.27	2.09	1.34	3.80	39.625	22.500	-1.70
Atlantic Energy*	20	12.18	38	4.31	28	3.64	1.56	1.42	3.74	39.750	32.500	24.57
Iowa Southern*	21	11.18	80	0.27	19	5.06	2.37	2.18	3.55	33.750	26.250	-0.41
MDU Resources Group	22	10.66	97	-5.33	41	2.72	1.08	0.91	1.89	23.000	17.875	-4.03
DPL*	23	9.37	91	-2.86	97	-7.20	1.47	1.34	3.27	30.875	24.125	-0.42
Eastern Utilities Associates*	24	9.08	13	9.20	62	1.27	0.40	0.42	2.95	41.750	30.375	9.02
Central Maine Power	25	8.47	23	7.66	51	1.83	0.87	0.89	1.92	20.625	16.875	-9.64
Cilcorp*	26	7.98	90	-2.61	64	1.19	1.67	1.74	3.58	39.375	31.875	-4.98
Delmarva Power & Light	27	7.77	56	2.78	16	5.91	1.42	1.45	1.80	21.250	17.000	NA
Sierra Pacific Power	28	7.10	15	9.06	4	12.86	1.18	1.13	2.05	25.875	22.375	3.02
Pacificorp	29	6.62	70	0.75	35	3.04	1.40	1.22	3.61	46.250	33.125	2.70
Washington Water Power*	30	6.60	19	8.70	12	7.14	0.83	0.98	2.70	31.375	26.000	-0.70
Pennsylvania Power & Light	31	6.44	27	6.44	44	2.68	1.21	1.13	4.05	42.875	34.250	1.20
Cincinnati Gas & Electric	32	6.28	45	3.73	25	4.27	2.19	2.17	4.34	32.375	24.375	10.05
Wisconsin Energy*	33	5.88	94	-3.07	67	1.01	2.33	2.26	2.88	32.125	25.125	-0.80
Philadelphia Electric	34	5.34	33	5.48	58	1.35	0.97	1.10	2.36	24.250	19.130	10.41
Houston Industries*	35	4.60	43	3.84	63	1.20	3.17	1.83	3.32	35.875	26.750	14.95
Duke Power	36	4.44	78	0.34	72	0.65	2.21	2.18	5.13	56.500	42.750	3.43
Northern States Power	37	4.17	84	-0.83	82	-0.14	1.91	1.89	3.24	40.000	30.250	-1.02
Florida Progress* (FPC)	38	4.06	28	6.36	55	1.45	1.73	1.85	3.67	40.250	33.250	21.40
Kansas City Power & Light	39	3.32	83	-0.69	80	-0.01	1.20	1.10	3.31	36.125	28.125	-6.80
IE Industries*	40	2.76	86	-1.11	93	-4.63	1.31	1.32	2.31	28.000	21.625	-0.64
Public Service Enterprise Group*	41	2.56	12	9.33	46	2.16	1.53	1.60	2.62	29.375	23.000	1.21
Nevada Power	42	2.47	62	2.29	9	7.96	1.52	1.67	1.81	25.875	19.250	14.44
SCEcorp*	43	2.15	9	10.42	50	1.84	1.22	1.33	3.56	41.000	31.000	-2.19
Union Electric	44	2.04	85	-0.93	76	0.41	1.51	1.31	2.61	28.625	23.000	-3.74
SCANA Corporation* (SCE&G)	45	1.56	46	3.69	38	2.96	1.36	1.51	3.04	35.750	29.625	13.36
Consolidated Edison	46	1.25	20	8.65	31	3.45	2.38	2.61	2.49	29.875	22.125	9.48
Central Vermont Public Service	47	0.76	42	3.87	74	0.50	1.25	1.34	2.59	29.000	22.125	7.53
Madison Gas & Electric	48	0.38	65	1.52	75	0.46	1.33	1.51	2.92	37.500	29.750	-0.68
American Electric Power*	49	0.33	29	6.19	5	12.18	1.19	1.16	3.25	33.375	25.750	-11.23
Iowa-Illinois Gas & Electric	50	0.26	82	-0.46	88	-2.13	1.84	1.83	4.21	46.125	37.125	-1.18
Potomac Electric Power	51	0.21	49	3.34	34	3.35	1.74	1.89	2.16	24.250	19.250	5.14
Otter Tail Power	52	0.19	92	-3.02	96	-6.60	2.23	2.22	1.94	24.375	18.750	-2.34
Orange & Rockland Utilities	53	0.06	10	10.17	32	3.40	1.29	1.40	3.14	32.000	27.250	0.93
Southern Company*	54	0.00	47	3.55	23	4.60	1.10	1.24	2.68	29.750	22.000	1.68
St Joseph Light & Power	55	-0.32	54	2.89	40	2.72	2.42	2.25	2.45	24.630	20.000	-6.04
General Public Utilities*	56	-0.47	57	2.72	79	0.15	1.50	1.74	5.01	47.250	36.250	8.97
San Diego Gas & Electric	57	-0.97	79	0.31	22	4.63	1.73	1.74	3.15	45.625	36.375	-5.66
Central Louisiana Electric	58	-1.01	36	5.11	37	2.98	1.22	1.32	3.55	36.000	31.125	-14.02
Empire District Electric	59	-1.44	99	-13.29	99	-13.61	1.67	2.02	2.94	32.125	26.500	12.33
Green Mountain Power	60	-1.82	6	11.99	3	14.56	1.59	1.94	2.36	27.875	22.125	36.21
Southwestern Public Service	61	-1.96	77	0.57	14	6.38	1.95	1.95	2.45	29.880	25.130	-1.07
IPALCO Enterprises*	62	-3.56	89	-2.36	94	-5.80	1.70	1.79	2.54	26.625	21.750	-2.44
Duquesne Light	63	-4.69	34	5.40	92	-4.60	0.72	0.75	2.03	23.875	17.375	-0.64
Allegheny Power System*	64	-4.96	39	4.04	21	4.64	1.42	1.50	3.72	42.500	35.625	-0.48
Southern Indiana Gas & Electric	65	-5.00	73	0.65	89	-2.19	1.66	1.83	2.81	32.125	27.500	4.85
Central & South West*	66	-5.56	67	1.47	53	1.51	1.11	1.44	3.25	40.250	29.750	0.91
Commonwealth Edison	67	-5.79	59	2.45	69	0.93	0.95	0.97	2.83	40.750	32.125	1.12
Rochester Gas & Electric	68	-6.14	16	9.01	39	2.87	1.02	1.04	2.10	22.125	17.000	-3.58
Oklahoma Gas & Electric	69	-6.21	41	3.93	52	1.53	1.72	1.93	3.05	39.000	32.000	-0.81
Dominion Resources*	70	-6.32	8	10.64	18	5.06	1.05	1.27	4.14	47.875	40.375	7.63
New York State Electric & Gas	71	-8.34	26	6.53	17	5.06	0.80	0.79	2.53	29.000	21.875	-1.98
FPL Group* (FP&L)	72	-8.35	30	5.88	13	7.10	1.19	1.43	3.12	36.750	29.000	2.20
KPL Gas Service	73	-8.87	95	-3.30	81	-0.04	1.32	1.55	2.05	25.375	21.750	-0.46
Puget Sound Power & Light	74	-9.95	5	12.18	6	10.90	1.24	1.38	1.88	22.500	18.000	-0.81
Northeast Utilities*	75	-10.62	63	2.24	49	1.97	0.92	1.22	1.92	23.000	18.500	-7.24
Baltimore Gas & Electric	76	-10.99	24	7.54	33	3.38	1.65	2.18	3.05	34.875	28.500	11.66
Wisconsin Power & Light	77	-11.14	74	0.65	26	4.09	1.86	2.04	1.93	24.500	21.875	-2.91
Louisville Gas & Electric	78	-11.84	58	2.61	11	7.80	1.30	1.67	3.20	41.750	32.000	12.39
Central Hudson Gas & Electric	79	-12.17	25	7.21	10	7.82	0.79	0.94	2.28	24.125	20.375	-0.26
Wisconsin Public Service	80	-13.50	93	-3.06	59	1.32	1.92	2.30	1.98	24.875	20.500	-0.39
Central Illinois Public Service	81	-18.44	87	-1.31	71	0.70	1.59	1.98	1.91	24.125	20.125	0.02
Northern Indiana Public Service	82	-30.29	61	2.32	56	1.42	0.62	0.77	1.00	19.625	13.125	-3.56
Niagara Mohawk Power	83	-33.86	44	3.77	65	1.15	0.35	0.60	0.78	14.750	10.750	10.93
Kansas Gas & Electric	84	-38.88	69	1.39	7	10.79	0.56	0.82	1.36	24.250	19.000	-5.96
TNP Enterprises* (Tex-NM Power)	85	-62.40	50	3.31	60	1.28	1.06	1.24	1.90	22.375	19.000	16.55
Portland General*	86	-127.68	35	5.37	24	4.34	-0.13	1.30	-0.22	25.500	20.875	-4.14
Boston Edison	87	-148.22	32	5.55	20	4.89	-0.31	0.70	-0.88	22.125	15.375	-1.83
Tucson Electric Power	88	-172.79	98	-6.53	91	-4.52	-1.40	3.07	-3.55	50.250	16.130	8.47
Middle South Utilities*	89	-214.98	37	4.45	57	1.37	-0.72	0.59	-2.31	23.250	15.500	-3.17
United Illuminating	90	-221.24	60	2.36	77	0.28	-0.72	0.66	-5.87	34.250	24.750	2.49
Illinois Power	91	-314.50	64	2.17	70	0.72	-1.48	0.72	-4.34	21.750	13.375	0.44
Gulf States Utilities	92	-370.50	31	5.72	68	0.99	-0.36	0.13	-1.00	14.375	7.625	-8.32
El Paso Electric	93	-1071.47	7	11.55	15	6.38	-1.73	0.20	-3.35	15.375	6.500	22.61
Pinnacle West Capital*	94	-13257.12	53	2.99	86	-1.53	0.82	1.17	2.53	16.375	5.000	2.83
Detroit Edison	95	NA	52	3.25	84	-0.91	0.83	-0.90	2.65	25.875	19.125	7.61
New England Electric*	96	NA	22	8.13	36	3.00	1.52	-0.41	2.36	28.875	22.250	14.29
Long Island Lighting	97	NA	11	9.81	47	2.00	-0.35	-2.60	-1.51	20.250	12.625	32.31
Public Service of New Mexico	98	NA	18	8.72	90	-2.28	0.93	-2.74	1.73	15.250	11.125	-18.26
Centerior Energy*	99	NA	81	0.00	87	-1.84	0.72	-0.20	1.90	20.875	13.375	-0.51
Public Service of New Hampshire	100	NA	100	NA	100	NA	NA	NA	NA	NA	NA	NA

ALPHABETICAL LISTING OF COMPANY PERFORMANCE

Company	Electric Sales (KWH) (millions)	Rank	Customers Served: Electric Total	Electric % Gain	Gas Total	Gas % Gain	Revenues: Total $ (1000's)	Revenues % Electric	Revenues % Gas	Net Income After Tax $ (Thousands)
Allegheny Power System*	59,134	9	1,270,634	1.58	0	0.00	2,258,203	100.00	0.00	194,908
American Electric Power*	117,505	2	2,715,784	1.22	0	0.00	5,140,392	100.00	0.00	628,917
Atlantic Energy*	7,618	70	440,720	2.55	0	0.00	705,020	100.02	0.00	80,964
Baltimore Gas & Electric	24,791	31	1,012,144	2.12	519,726	0.19	2,004,136	75.81	20.55	243,910
Boston Edison	13,753	49	672,992	1.41	0	0.00	1,269,345	100.00	0.00	(33,788)
Carolina Power & Light	38,597	16	950,492	2.10	0	0.00	2,480,803	100.00	0.00	376,067
Centel*	2,655	94	136,093	0.15	0	0.00	1,187,675	13.89	0.00	445,250
Centerior Energy*	27,581	27	1,020,616	0.69	0	0.00	2,302,436	100.00	0.00	266,886
Central Hudson Gas & Electric	5,625	78	249,501	2.33	53,747	2.25	470,002	85.79	14.21	33,419
Central Illinois Public Service	7,496	73	306,853	0.30	158,056	0.55	492,958	100.00	0.00	65,366
Central Louisiana Electric	5,424	79	199,466	0.53	0	0.00	316,471	100.00	0.00	39,884
Central Maine Power	9,137	64	488,818	5.22	0	0.00	704,085	100.00	0.00	45,402
Central Vermont Public Service	3,195	92	137,000	2.24	0	0.00	229,307	98.63	0.00	17,247
Central & South West*	48,198	13	1,546,000	0.98	0	0.00	2,549,000	96.51	3.22	306,000
Cilcorp*	4,987	85	185,363	0.75	189,220	1.09	458,630	61.18	30.81	48,399
Cincinnati Gas & Electric	19,100	38	668,868	2.00	392,731	2.03	1,437,511	72.64	27.36	219,434
CMS Energy*	29,667	26	1,452,901	1.56	1,338,489	1.93	2,961,100	58.16	40.25	312,142
Commonwealth Edison	72,211	4	3,179,622	1.31	0	0.00	5,751,050	100.00	0.00	598,503
Commonwealth Energy System*	7,290	74	342,000	2.09	224,000	1.82	805,860	65.09	33.27	40,145
Consolidated Edison	34,935	20	2,920,693	0.78	1,028,491	0.17	5,550,621	82.46	12.49	568,746
Delmarva Power & Light	10,829	56	361,160	2.73	82,883	3.26	789,707	85.90	10.98	91,308
Detroit Edison	40,585	15	1,905,345	1.23	0	0.00	3,203,031	99.01	0.00	388,933
Dominion Resources*	55,907	12	1,747,285	2.60	0	0.00	3,699,900	93.49	0.00	410,700
DPL*	12,584	54	449,084	1.06	276,421	0.78	960,463	74.05	24.77	136,354
Duke Power	66,628	6	1,595,037	1.91	0	0.00	3,648,238	99.76	0.00	519,134
Duquesne Light	13,739	50	572,592	0.62	0	0.00	1,120,680	100.00	0.00	113,002
Eastern Utilities Associates*	4,162	90	256,602	1.50	0	0.00	408,577	97.95	0.00	40,877
El Paso Electric	5,873	76	239,137	2.55	0	0.00	426,248	99.43	0.00	(117,645)
Empire District Electric	3,121	93	116,037	2.04	0	0.00	133,361	99.52	0.00	16,745
Entech*	10,023	58	247,568	0.68	110,947	3.12	271,909	126.22	39.97	42,676
Florida Progress* (FPC)	26,511	29	1,129,078	3.72	0	0.00	2,129,400	71.93	0.00	187,100
FPL Group* (FP&L)	64,146	7	3,122,859	3.46	0	0.00	6,197,796	77.15	0.00	410,416
General Public Utilities*	38,511	17	1,841,605	1.37	0	0.00	2,911,194	99.96	0.00	282,464
Green Mountain Power	2,452	95	76,333	2.54	0	0.00	144,028	99.17	0.00	8,736
Gulf States Utilities	27,466	28	563,277	1.02	82,681	0.21	1,607,406	93.43	2.26	(108,412)
Hawaiian Electric*	7,649	69	339,839	2.76	0	0.00	884,115	88.42	0.00	64,075
Houston Industries*	57,798	11	1,353,475	1.71	0	0.00	3,789,780	82.29	0.00	413,452
Idaho Power	14,004	48	284,377	1.73	0	0.00	496,161	100.00	0.00	80,452
IE Industries*	4,487	86	208,447	0.73	122,540	0.51	433,374	70.91	23.46	35,097
Illinois Power	15,841	45	548,726	0.42	386,960	0.42	1,312,630	75.27	24.73	(325,797)
Interstate Power	4,359	89	157,489	0.46	46,050	0.68	270,712	79.23	20.77	25,387
Iowa Resources*	5,242	84	249,234	1.34	0	0.00	360,570	97.02	0.00	41,703
Iowa Southern*	2,158	97	94,185	0.45	38,252	0.63	137,692	74.76	23.40	20,468
Iowa-Illinois Gas & Electric	4,445	88	192,516	0.53	229,705	0.66	494,084	58.41	41.59	56,499
IPALCO Enterprises*	11,248	55	379,261	1.61	0	0.00	595,036	95.89	0.00	95,514
Kansas City Power & Light	10,220	57	409,467	1.17	0	0.00	731,480	98.98	0.00	102,259
Kansas Gas & Electric	8,944	66	254,810	1.18	0	0.00	533,533	98.09	0.00	46,672
Kentucky Utilities	13,135	51	412,300	1.38	0	0.00	531,895	100.00	0.00	87,921
KPL Gas Service	9,798	61	302,127	1.16	1,066,262	0.78	1,127,623	40.11	59.89	70,921
Long Island Lighting	16,802	44	996,487	0.75	426,060	1.10	2,347,614	84.48	15.52	(167,835)
Louisville Gas & Electric	9,775	62	320,577	0.93	243,625	1.13	676,900	72.59	27.41	66,625
Madison Gas & Electric	2,216	96	111,055	1.43	84,556	3.10	217,588	60.59	39.34	20,038
MDU Resources Group	2,147	98	109,691	-0.32	175,835	0.17	263,328	45.96	54.04	16,508
Middle South Utilities*	58,864	10	1,706,595	0.77	156,232	-2.06	3,724,004	97.57	2.43	(472,585)
Midwest Energy*	5,301	82	155,933	0.34	346,594	0.48	572,528	40.69	49.88	49,174
Minnesota Power	9,912	60	119,521	1.34	17,991	101.69	463,902	83.63	2.26	84,140
Nevada Power	8,391	67	318,036	10.05	0	0.00	418,373	100.00	0.00	51,467
New England Electric*	21,394	34	1,253,425	1.61	0	0.00	1,643,199	93.83	0.00	138,650
New York State Electric & Gas	17,516	42	757,979	1.77	142,403	2.13	1,427,745	88.72	11.28	144,804
Niagara Mohawk Power	35,396	19	1,504,000	1.48	466,000	1.75	2,906,043	83.23	16.77	105,601
Northeast Utilities*	24,892	30	1,251,680	1.30	0	-100.00	2,330,517	92.61	5.33	209,083
Northern Indiana Public Service	12,936	52	377,457	1.20	585,789	1.42	1,559,565	56.57	43.43	72,112
Northern States Power	34,747	21	1,300,119	1.51	345,233	3.41	1,989,714	83.15	16.32	202,619
Ohio Edison	31,878	24	1,025,709	1.00	0	0.00	2,154,969	98.83	0.00	332,932
Oklahoma Gas & Electric	19,508	37	638,558	0.40	0	0.00	1,141,319	100.00	0.00	126,920
Orange & Rockland Utilities	4,461	87	245,685	1.82	104,189	1.70	536,194	76.10	23.38	40,321
Otter Tail Power	3,257	91	121,301	-0.02	0	0.00	172,840	100.00	0.00	23,068
Pacific Gas & Electric	63,791	8	4,110,000	2.07	3,372,000	2.19	8,588,264	72.38	27.62	900,628
Pacificorp	47,691	14	1,217,631	1.34	0	0.00	2,173,597	99.96	0.00	329,566
Pennsylvania Power & Light	34,672	22	1,143,591	1.87	0	0.00	2,356,446	99.93	0.00	353,436
Philadelphia Electric	32,675	23	1,453,185	1.10	340,186	2.24	3,405,629	88.68	11.32	493,807
Pinnacle West Capital*	17,489	43	594,820	2.20	0	0.00	1,507,909	95.97	0.00	(551,415)
Portland General*	17,889	41	565,824	2.47	0	0.00	796,910	98.39	0.00	(26,933)
Potomac Electric Power	23,485	33	638,116	1.97	0	0.00	1,394,909	99.98	0.00	174,252
Public Service Enterprise Group*	37,271	18	1,848,755	0.88	1,448,732	1.12	4,804,852	68.26	28.36	542,137
Public Service of Colorado	19,716	36	983,616	0.98	853,065	1.38	1,740,666	65.46	33.16	136,195
Public Service of Indiana	20,690	35	586,278	1.59	0	0.00	1,059,165	98.20	0.00	125,230
Public Service of New Hampshire	NA	100	0	NA	0	0.00	NA	NA	NA	0
Public Service of New Mexico	8,006	68	287,083	1.85	339,227	0.99	915,310	67.78	30.90	72,137
Puget Sound Power & Light	18,779	39	717,538	3.76	0	0.00	887,773	100.00	0.00	104,367
Rochester Gas & Electric	7,558	71	325,738	1.27	258,280	1.63	845,697	68.72	31.28	71,444
San Diego Gas & Electric	14,439	47	1,069,610	3.59	661,503	2.91	2,082,485	63.62	14.42	175,924
SCANA Corporation* (SCE&G)	14,885	46	435,001	1.85	205,657	2.11	1,123,283	73.19	26.45	122,625
Sierra Pacific Power	5,275	83	232,215	3.48	73,741	4.29	445,411	81.40	11.50	44,990
SECcorp*	69,136	5	3,940,949	2.85	1,198	0.42	6,904,386	94.41	0.01	778,241
Southern Company*	136,872	1	3,238,000	1.60	0	0.00	7,492,000	99.19	0.00	846,000
Southern Indiana Gas & Electric	5,344	80	113,851	0.79	94,252	1.52	316,506	78.32	20.11	34,931
Southwestern Public Service	18,094	40	347,742	-0.02	0	0.00	799,031	99.49	0.00	100,286
St Joseph Light & Power	1,305	99	58,899	1.18	6,078	32.53	79,082	86.54	5.83	10,678
TECO Energy*	12,896	53	453,455	2.32	0	0.00	1,060,022	87.33	0.00	133,832
Texas Utilities*	81,943	3	2,131,870	1.01	0	0.00	4,320,528	100.00	0.00	779,084
TNP Enterprises* (Tex-NM Power)	6,212	75	201,105	0.97	0	0.00	378,289	100.00	0.00	15,408
Tucson Electric Power	7,505	72	264,825	1.61	0	0.00	507,621	100.00	0.00	(89,851)
Union Electric	30,146	25	1,078,784	1.09	111,269	1.31	2,010,306	96.00	3.82	266,471
United Illuminating	5,307	81	307,654	0.14	0	0.00	531,181	99.37	0.00	(81,583)
Utilicorp United	5,849	77	252,168	2.48	534,867	31.36	731,933	39.06	60.94	48,314
Washington Water Power*	9,970	59	244,530	0.77	87,710	2.84	589,509	66.88	12.94	60,321
Wisconsin Energy*	24,293	32	882,883	2.15	0	0.00	1,493,353	83.42	0.00	193,957
Wisconsin Power & Light	9,600	63	336,259	1.00	121,111	2.69	604,818	76.56	17.82	51,482
Wisconsin Public Service	8,957	65	322,582	1.54	172,519	1.86	585,812	75.61	24.39	45,694

Rank '89	Rank '88	Company	$ Income (millions)	'89% Change
1	60	Pacific Gas & Electric	900.628	1349.66
2	1	Southern Company*	846,000	0.00
3	3	Texas Utilities*	779,084	21.23
4	2	SCEcorp*	778,241	2.15
5	5	American Electric Power*	628,917	0.33
6	4	Commonwealth Edison	598,503	-5.79
7	6	Consolidated Edison	568,746	1.25
8	7	Public Service Enterprise Group*	542,137	2.56
9	8	Duke Power	519,134	4.44
10	9	Philadelphia Electric	493,807	5.34

lapse of its Mera Bank subsidiary and serious problems with its real estate and mineral prospecting operations. Middle South Utilities, now Entergy Corp., also suffered heavily (-$472.6 million) as a result of continuing problems over its nuclear facilities.

There were some changes in the ranking of the biggest income producers. PG&E, after falling to 60th last year, jumped to the top in 1989, dropping Southern Company to second. SCECorp fell to fourth from second a year ago. Commonwealth Edison Co. also dropped two positions, to sixth in '89.

In terms of performance, PG&E also ranked first, on the strength of its recovery from its '88 drop to 88th position. Centel, with two small electric utility operations, moved into the runnerup spot on the strength of its extensive communications operations.

Most of the companies posting large gains in 1989 were recovering from poor performances in 1988. For example, seven of the top 10 performers this year were among the 25 poorest performers a year ago.

Also, most of the top income growth performers began with substantial revenue growth. For example, PG&E's lead came on revenue increases ranked 4th; and Idaho Power's 4th ranking came on revenue gains ranked 2nd. Exceptions were Interstate Power Co., 6th in income gain on revenue gains that ranked 88th; Iowa Resources Inc., 7th in income gain but 48th in revenue gain; and Minnesota Power Co., 10th in income growth on the strength of revenue gains ranked 71st. The high rankings of these latter three companies, achieved without unusually high revenue increases, reflect substantial efforts to control costs.

Median income growth was only slightly better than no growth at all, at just 0.26 percent, and was below median 1988 income growth of 1.56 percent.

The improvement in quality of net incomes results from reductions in Allowances for Funds Used During Construction as construction projects have been concluded and/or reduced. AFUDC is an accounting entry that increases net income without actually creating cash. Reducing AFUDC generally means income and earnings reflect *real* performance.

Earnings off

Per-share earnings declined in 1989, to an average of $2.19 from $2.30 (restated) a year earlier, reflecting increases in total shares outstanding. As mentioned previously, however, the quality of the earnings was stronger.

The median earnings gain also was off slightly in 1989, falling to 0.31 percent from 0.54 percent in '88. A total of 66 of 99 companies posted earnings above the average; a year ago 56 companies exceeded the average rate.

WAYNE BEATY, Senior Editor-T&D

Interest in information acquisition and control systems flourishes

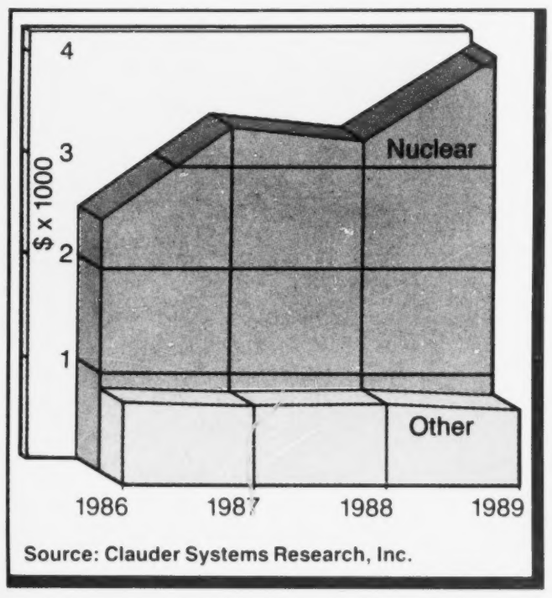
The need for adequate, accurate data to operate and control power systems from generation control to distribution automation has never been more essential than during these present times.

This emphasis is reflected in the recent survey and report by Clauder Systems Research Inc. (CSR), San Jose, CA. The report on generating plant monitoring and control systems identifies 496 projects, valued at $527 million, that are planned for between December 1989 and June 1992 (2.5 years).

Generation

Data for the monitoring and control in electric utility generating plants includes all U.S. and Canadian utilities with capacities of 30 MW or more. Data from 1985 through 1989 indicate a sharp rise for planned non-nuclear-plant systems in 1988 to almost $400 million but then drops to about $300 million in 1989.

Systems for nuclear plants show a steady drop from 1985 through 1987 but then show a steady gain for 1988 and 1989, reaching a level of about $190 million. The average cost per system for non-nuclear plants is decreasing to about $800,000 while the nuclear systems show a fairly significant increase, especially in the last three years, to a level of about $4 million.



Average cost of nuclear plant monitoring and control systems shows steady increase compared with a slight decrease for other plant systems. Cost of control system hardware (other than distributed control systems) is decreasing.

EMS/SCADA

Other CSR reports indicate similar interest in Energy Management Systems (EMS) and Supervisory Control and Data Acquisition (SCADA) with an installed base of 525 projects, both valued at $997 million with an additional 688 projects to be awarded in the next 30 months valued at $710 million.

Report	Projects	Value
Generation	497	$525-M
EMS/SCADA (existing)	525	$997-M
EMS/SCADA (pending)	688	$710-M
AM/FM	323	$228-M
DAS	137	$ 36-M
LMS	246	$162-M

Source: Clauder Systems Research, Inc.

European utilities have a similar amount ($744 million) planned for 317 EMS/SCADA systems in the same time period. Almost $10 million of this was for Remote Terminal Unit (RTU) add-on projects. CSR contacted over 900 utilities in 19 countries to gather the data.

Interest in automated mapping (AM), facilities management (FM) and geographic information systems (GIS) was evident at the recent AM/FM International meeting in Baltimore. Some 1533 attendees from the U.S. and several foreign countries were at the 13th annual conference—up from a little over 1000 last year.

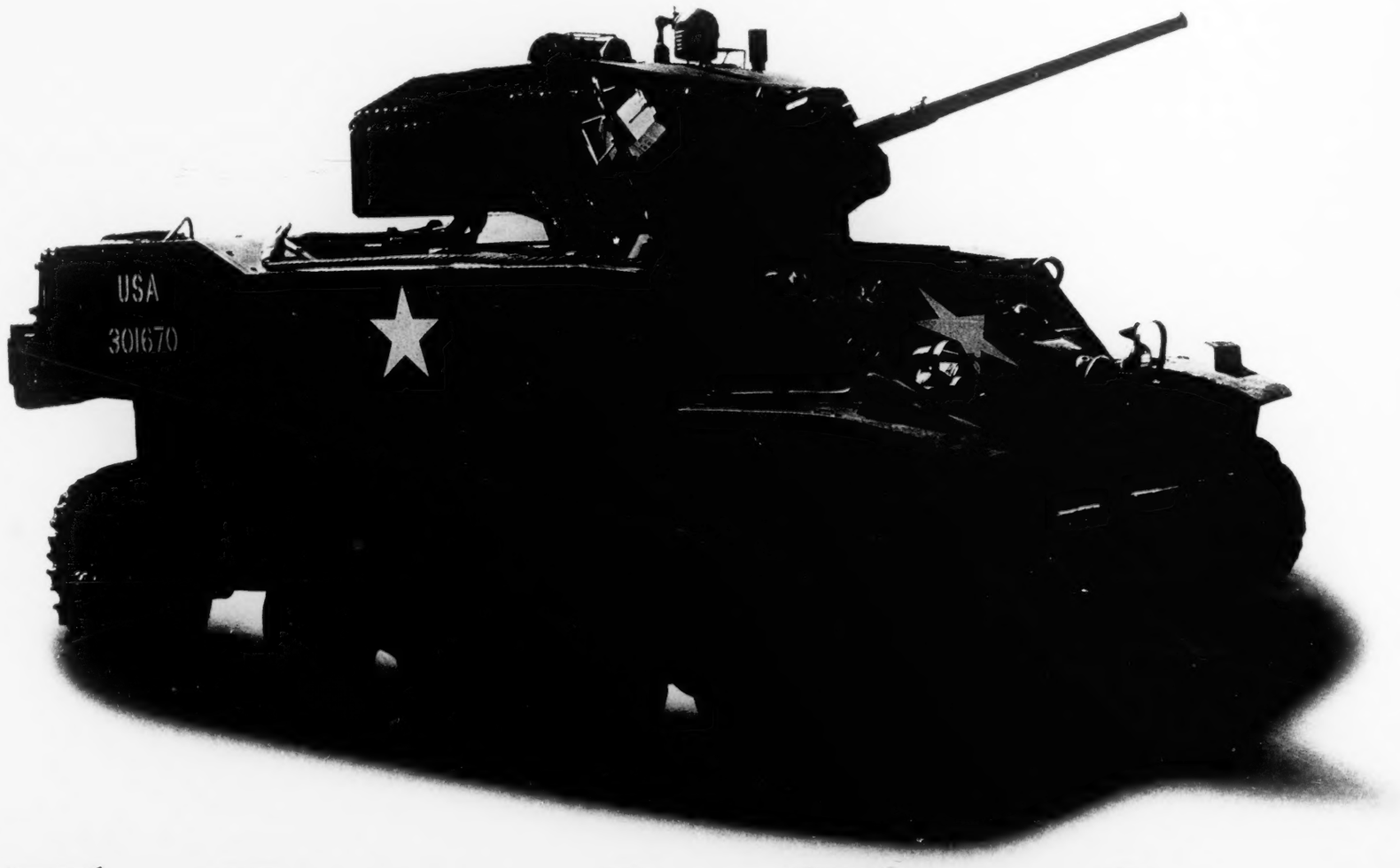
There was also a significant increase in exhibitors this year—155 compared to 108 last year. Next year's conference in San Diego promises to be even bigger and better according to Robert M. Samborski, executive director of AM/FM International.

Executive symposium

AM/FM International is sponsoring an Executive Management Symposium in Keystone, CO, July 8-10 geared primarily for utility management who are interested in learning more about how this relatively new technology may fit into their systems.

For additional information contact: Robert M. Samborski, AM/FM International, 14456 E. Evans Ave., Aurora, CO 80014, 303/337-0513.

For more information on CSR Reports contact: Hershel E. Clauder, 4855 Atherton Ave., Suite 202, San Jose, CA 95130, 408/370-7382.



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